

SEQUENCE LISTING

<110> FLINDERS TECHNOLOGIES PTY. LTD.

<120> A METHOD FOR PRODUCTIVITY IMPROVEMENT AND AGENTS USEFUL FOR SAME

<130> 12469560/TDO

<150> 60/485,241

<151> 2003-07-07

<160> 33

<170> PatentIn version 3.1

<210> 1

<211> 1158

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(1155)

<223> "n" is unknown nucleotide

<400> 1

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cggatacaac catttctcnc atgggatggt ggtggaaant ttttncggtt ggggatgggc	180
tcgcggccta tcaccttggt ggtgggggtga tggcctacca aggcgacgaa cggtagcccg	240
cctgagaggg cgaccggcca cactgggact gagacaccgc ccgaactcct acgggaggca	300
gcactgggga atattgcca tgggcggaag cctgacgcag ngacgccgcg tgggggatga	360
cggccttngg gttgtaaacc tntttcagca gggacgaagt tgacgtgtac ctgtagaaga	420
agcgccggct aaatangtc cagcagccgc ggtaatangt agggcgcgag cgttntccgg	480

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aattattggg cgtaaagagt ttgtaggtgg cttgttgctt ttgccgtgaa agcccggtggc 540
ttaantacgg gtttgcggtg gatacgggca ggctagaggc tggtaggggc aagcggaatt 600
cctgggtgtag cggtgaaatg cgcagatata aggaggaaca ccggtggcga aggcggcttg 660
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ggtagtccac gctgtaaacg ttgggcgcta ggtgtggggg tcttccacga tctctgtgcc 780
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aattgacggg ggcccgacac agcggcgag catgttgctt aattcgacgc aacgcgaaga 900
accttaccaa ggtttgacat acaaccgaaa cactcanana tgggtgcctc ctttgactg 960
gtgtacaggt ggtgcatggc tgtcnncacc ctctgtctgt nagatgtngg gtttaagtccc 1020
gcaacgancg caacccttgg ttccatgttg ccagcacncc ctttgnggtg gtggggacnc 1080
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ccttatgttc ttgnngtg 1158

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<210> 2

<211> 1437

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(1437)

<223> "n" is unknown nucleotide

<400> 2

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ggggtctaat accggataac actnctgctc tcattggcag ggggtaaaag ctccggcggt 180
gaaggatgag cccgcggcct atcagcttgt tggtagagga atggctcacc aaggcgacga 240
cgggtagccg gcctgagagg gcgaccggcc aactggggac tgagacacgg ccagactcc 300
tacgggaggg agcagtgggg aatattgcaa caatgggcga aagcctgatg cagcgacgcc 360
gcgtgaggga tgacggcctt cgggttgtaa acctctttca gcagggaaga agcgaaagtg 420
acggtacctg cagaagaagc gccggctaac tacgtgccag cagccgcggt aatacgtagg 480
gcgcaagcgt tgtccggaat tattgggcgt aaagagcttg taggcggctt gtcacgtcgg 540

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gtgtgaaagc ccggggctta accccgggtc tgcattcgat acgggctagc tagagtgtgg 600
 taggggagat cggaattcct ggtgtagcgg tgaaatgcgc agatatcagg aggaacaccg 660
 gtggcgaagg cggatctctg ggccattact gacgctgagg agcgaaagcg tggggagcga 720
 acaggattag ataccctggt agtccacgcc gtaaacggtg ggaactaggt gttggcgaca 780
 ttccacgtcg tcggtgccgc agctaacgca ttaagttccc cgcctgggga gtacggccgc 840
 aaggctaaaa ctcaaaggaa ttgacggggg ccgcacaaag cagcgcagca tgtggcttaa 900
 ttcgacgcaa cgcgaagaac cttaccaagg cttgacatac accggaaagc atcagagatg 960
 gtgccccctt tgtggttcgg tgtacagggt gtgcatgggt gtcgtcagct cgtgtcgtga 1020
 gatgttgggt taagtccgc aacgagcgca acccttggtc tgtgttgcca gcatgccctt 1080
 cggggtgatg gggactcaca ggagaccgcc ggggtcaact cggaggaagg tggggacgac 1140
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 gagctgcgat accgtgaggt ggagcgaatc tcaaaaagcc ggtctcagtt cggattgggg 1260
 tctgcaactc gaccccatga agtcggagtt gctaataatc gcanatcagc attgctgcgg 1320
 tgaatacgtt cccgggcctt gtacacaccg cccgtcacgt cagcaaagtc ggtaacaccc 1380
 gaagccggtg gccaacccct tgtgggaggg agctgtcgaa ggtgggactg gcgattg 1437

<210> 3

<211> 317

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(311)

<223> "n" is unknown nucleotide

<400> 3

gtaatggccc anaaaaccgc ctccgccacc ggtgttcctc ctgatatctg cgcatttcac 60
 cgctacacca ggaattccna tctcccctac cacactctag ctagcccgta tcnatgcaa 120
 actcgggggtt aagcccnag ctttcacatc cgacgtgaca agccgcctac aanctcttta 180
 cgcccaataa ttccgganaa cgctcgcacc ctacntntta ccgaggctgc tggcncgtnt 240
 ttagccggtg cttcttctgc aggtaccgtc actttcgctt cttccctgct naaaaagggt 300
 tacaacccta nggcctg 317

<210> 4
 <211> 1048
 <212> DNA
 <213> actinomycete

<220>
 <221> misc_feature
 <222> (1)..(1043)
 <223> "n" is unknown nucleotide

<400> 4
 tgagggatga cggcnttcgg ggttgtaaac nttntncacc agggaagaag cgaaagtgnc 60
 ggtacctgca gaagaagcgc cgnctaacta cgggccagca tccgcggtaa tacgtagggc 120
 gcaatcgttg tccggaatta ntgggcgtaa agagntcgta ggcggcttat cacgtcgggt 180
 gtgaaagccc ggggcttaag ccccggtct gcattcgata cgggctagct agantntgnt 240
 aggggagatc ggaattcctg gtgtagcggg gaaatgcgca gatatcagga ggaacaccgg 300
 tggcgaaggc ggatctctgg gccattactg acgctgagga gcgaaagcgt ggggagcgaa 360
 caggattaga taccctggta gtccacgccg taaacgggtg gaactaggtg ttggcgacat 420
 tccacgtcgt cggtgccgca gctaacgcat taagttcccc gcctggggag tacggccgca 480
 aggctaaaac tcaaaggaat tgacgggggc ccgcacaagc agcggagcat gtggcttaat 540
 tcgacgcaac gcgaagaacc ttaccaaggc ttgacatata ccggaaagca tcagagatgg 600
 tgccccctt gtggtcggtg tacaggtggt gcatggctgt cgtcagctcg tgctcgtgaga 660
 tgttgggtta agtcccgcaa cgagcgcaac ccttggttct gtgttgccag catgcccttc 720
 ggggtgatgg ggactcacag gagaacgccg ggggtcaactc ggaggaaggt ggggacgacg 780
 tcaagtcac atgcccccta tgtcttgggc tgcacacgtg ctacaatggc aggtaaatga 840
 gctgcgatac cgtgaggtgg agcgaatctc aaaaaagcct gtctcanttc ggattggggg 900
 ctgnaantcg accccatgaa agtcggaggt gctaattatc ccagatcaac attgctggcg 960
 gtgaatacgt tcccggggcc ttggtaaaca ccgccgtca angtnaagaa agtcgggtaa 1020
 cacccgaaan ccggtgggcc aancctt 1048

<210> 5
 <211> 508
 <212> DNA
 <213> actinomycete

<220>
 <221> misc_feature
 <222> (1)..(472)
 <223> "n" is unknown nucleotide

<400> 5
 ccgccttcgc caccgggtgt tcctcctgat atctgcgcgt ttcaccgcta caccaggaaa 60
 ttccnatctc ccctaccaca ctctanctan cccgratcga atgcaaaccg ggggttaanc 120
 cccgggcttt cacaccgcac ntgacaagcc gcctacaaac tctttacgcc caataattcc 180
 ggacaacgct tgcgccttac ntattaccgc ggctgctggc acntatttag cggcgcttc 240
 ttctgcaggt accgtcactt tcgcttcttc cctgctgaaa aagggtttaca acccgaaggc 300
 cgtcatccct cagcgggcgt cgtgcacatc ggctttcgcc cattgtgcaa tattccccac 360
 tgctgcctcc cntaggaatc tgggccgtgt ctcaatccag tgtggccggc cccctctcng 420
 gccggctacc gtctccctt ggtnaccatt anctcaccaa caactgatag gncgcgggct 480
 catcttcacg cgggaacttt caaccacc 508

<210> 6
 <211> 1420
 <212> DNA
 <213> actinomycete

<400> 6
 ggcggcgtgc ttaacacatg caagtogaac gatgaagccc ttcgggggtgg attagtggcg 60
 aacgggtgag taacacgtgg gcaatctgcc ctctactctg ggacaagccc tggaaacggg 120
 gtctaatacc ggatacgatt cgggagggcat ctctggttac tggaaagctc cggcggtgaa 180
 ggatgagccc gcggcctatc agcttggtgt gggtaatggc ctaccaaggc gacgacgggt 240
 agccggcctg agagggcgac cggccacact gggactgaga cacggcccag actcctacgg 300
 gaggcagcag tggggaatat tgcacaatgg gcgaaagcct gatgcagcga cgcgcgtga 360
 gggatgacgg ctttcgggtt gtaaacctct ttcagcaggg aagaagcgag agtgacggta 420

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cctgcagaag aagcgccggc taactacgtg ccagcagccg cggtaatacg tagggcgcaa      480
gcgttggtccg gaattattgg gcgtaaagag ctcgtagggc gcttggtcacg tcgggtgtga      540
aagccccgggg ctttaacccc ggtctgcacg cgatacgggc aggctagagt gtggtagggg      600
agatcggaat tcctggtgta gcggtgaaat gcgcagatat caggaggaac accggtggcg      660
aaggcggatc tctggggccat tactgacgct gaggagcgaa agcgtgggga gccaacagga      720
ttagataccc tggtagtcca cgccgtaaac gttggaacta ggtgttgggc acattccacg      780
tcgtcggtgc cgcagctaac gcattaagtt ccccgcttgg ggagtacggc cgcaaggcta      840
aaactcaaag gaattgacgg gggcccgcac aagcagcgga gcatgtggct taattcgacg      900
caacgcgaag aaccttacca aggcttgaca tataccggaa agcgccagag atggtgcccc      960
ccttggtggtc ggtatacagg tgggtgcatgg ctgtcgtcag ctcggtgcgt gagatgttgg     1020
gttaagtccc gcaacgagcg caacccttgt cctgtgttgc cagcatgccc ttccgggtga     1080
tggggactca caggagaccg ccgggggtcaa ctcgaggaa ggtggggacg acgtcaagtc     1140
atcatgcccc ttatgtcttg ggctgcacac gtgctacaat ggccggtaca aagagctgcg     1200
atgccgtgag gcggagcgaa tctcaaaaag ccggtctcag ttcggattgg ggtctgcaac     1260
tcgaccccat gaagtcggag ttgctagtaa tcgcagatca gcattgctgc ggtgaatacg     1320
ttcccggggc ttgtacacac cgcccgtcac gtcacgaaag tcggtaacac ccgaagccgg     1380
tggcccaacc cctcggggag ggagctgtcg aagggtgggac                        1420

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<210> 7

<211> 1239

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(1217)

<223> "n" is unknown nucleotide

<400> 7

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gcttnttggt gggncnatgg cctaccaagg ngaggacggn tanccngcct gngagggaga      60
ccgnccacac tgggaatgng anacggccca gaatcctacg ggaggcagca nnggggaana     120
ttgcacaang ggcgaaagcc tgatgcagng angccgcgtg agggaagacg gcctttgggt     180
tgtaaacctn ttnagcagg gaagaagcga aagtgcgggt acctgcagaa gaagcgccgg     240

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ctaantangt gccagcagcc gcggttaatan gtagggccca agcgttggtcc ggaattattg      300
ggcgtaaaga gcttgtaggc ggcttggtcan gtnggatgtg aaagcccggg gcttaacccc      360
gggttttcat ttgatacggg ctagctagag tgtggtaggg gagatnggaa ttcttggtgt      420
agcggtgaaa tgcgcagata tcaggaggaa caccggtggc gaaggcggat ctctggggcca      480
ttactgacgc tgaggagcga aagcgtgggg agcgaacagg attagatacc ctggtagtcc      540
acgccgtaaa cggttggaac taggtgttgg cgacattcca cgctcgtcggg gccgcagcta      600
acgcattaag ttccccgcct ggggagtagc gccgcaaggc taaaactcaa aggaattgac      660
gggggccccgc acaagcagcg gagcatgtgg ctttaattcga cgcaacgcga agaaccttac      720
caaggcttga catataccgg aaagcatcag agatggtgcc ccccttggtg tcggtataca      780
ggtggtgcat ggctgtcgtc agctcgtgtc gtgagatgtt gggttaagtc ccgcaacgag      840
cgcaaccctt gttctgtgtt gccagcatgc ccttcggggg gatggggact cacaggagac      900
tggcggggtc aactcggagg aaggtgggga cgacgtcaag tcatcatgcc cttatgtct      960
tggggctgca cacgtgttac aatggccggt acaatgagct gcgatgccgc gaggcggagc     1020
gaatctcaaa aagccggtct cagttcggat tgggggtctg naactcgacc ccatgaantc     1080
ggagttgcta ataatcccaa attcancatt ggtgcggtga atacttcccc ggcttggtac     1140
acnaccgccc gtcaactcac gaaagtcggt naaacccgaa accggtgggc caacccttg      1200
tgggaaggaa ctggccnaag tgggactggc gattgggac                                1239

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<210> 8

<211> 431

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(424)

<223> "n" is unknown nucleotide

<400> 8

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cgccttcgc caccggtgtt cctcctgata tctgcgcatt tcacogctac accaggaatt      60
ccnatctccc ctaccacact ctagctagcc cgtatcaaatt gcaaaccgga ggtaagccc      120
cgggctttca catccnacgt gacaagccgc ctacaanctc tttagcccca ataattccgg      180
acaacgcttg cgccctaent attaccgagg ctgctggcac ntatttagcc ggcgcttctt      240

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- 8 -

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ctgcaggtac cgtcactttc gctncttccc tgctgaaana ggtttacaac ccaaaggccn      300
tcattccctcn ccggctcctt tgctctnggc ttncncccat tgttcaannt tccccactgc      360
tncctccctt cggaatctgg gccgntgtct cattcccttt ntggccgggc cccctcncag      420
gccngctacc c .                                     431

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<210> 9

<211> 653

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(640)

<223> "n" is unknown nucleotide

<400> 9

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ctcagcgctcn gtaatggccc aaaaaccgcc ttogccaccg gtgttcctcc tgatatctgc      60
gcatttcacc gctacaccag gaattccnat ctcccttacc acactctagc tagcccgat      120
cnaatgcaaa ccgggggtta anccccgggc ttccacatcc nacntgacaa gccgcctaca      180
anctctttac gcccaataat tccggacaac gcttgcncct tacttattac cgcggctgct      240
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ccantgtggc cggtcgccct ctacggccgg ctaccgctcn tnccttggg aggccattac      480
cccaccaaca agctnatagg ccgcgggctc atccttcacc gccggaagct ttcaaccccn      540
tccatgcggg anaaattggt ntccggtatt aaaccccggt tccagggnnt gtcccaaaat      600
tgaagggggg attgnccact ttttactcac ccgttcncn ctaatccacc acc              653

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<210> 10

<211> 1444

<212> DNA

<213> actinomycete

<400> 10

acgaacgctg gcggcggtgct taacacatgc aagtcgaacg atgaagccgc ttcggtggtg	60
gattagtggc gaacgggtga gtaacacgtg ggcaatctgc ccttcactct gggacaagcc	120
ctggaaacgg ggtctaatac cggataaacac tctgtcccgc atgggacggg gttgaaagct	180
ccggcggtga aggatgagcc cgcggcctat cagcttggtg gtggggtaat ggcctaccas	240
ggcgacgacg ggtagccggc ctgagagggc gaccggccac actgggactg agacacggcc	300
cagactccta cgggaggcag cagtggggaa tattgcacaa tgggcgaaag cctgatgcag	360
cgacgccgcg tgagggatga cggccttcgg gttgtaaacc tctttcagca gggagaagc	420
gaaagtgcag gtacctgcag aagaagcgcc ggctaactac gtgccagcag ccgcggtaat	480
acgtagggcg caagcgttgt ccggaattat tgggcgtaaa gagctcgtag ggcgcttgct	540
acgtcggatg tgaaagcccc gggcttaacc ccgggtctgc attcgatacg ggctagctag	600
agtgtggtag gggagatcgg aattcctggt gtagcggtag aatgcgcaga tatcaggagg	660
aacaccggtg gcgaaggcgg atctctgggc cttactgac gtctgaggag cgaagcgtg	720
gggagcgaac aggattagat accctggtag tccacgccgt aaacgttggg aactaggtgt	780
tggcgacatt ccacgtcgtc ggtgccgcag ctaacgcatt aagttccccg cctggggagt	840
acggccgcaa ggctaaaact caaaggaatt gacgggggcc cgcacaagca gcggagcatg	900
tggcttaatt cgacgcaacg cgaagaacct taccaaggct tgacatatac cggaaagcat	960
cagagatggt gcccccttg tggtcggtat acagggtggtg catggctgtc gtcagctcgt	1020
gtcgtgagat gttgggttaa gtcccgcaac gagcgcaacc cttgttctgt gttgccagca	1080
tgcccttcgg ggtgatgggg actcacagga gaactgccgg gtcaactcgg aggaaggtgg	1140
ggacgacgtc aagtcacat gcccccttatg tcttgggctg cacacgtgct acaatggccg	1200
gtacaatgag ctgcgatgcc gcgaggcgga gcgaatctca aaaagccggt ctgagttcgg	1260
attgggggtct gcaactcgac cccatgaagt cggagttgct agtaatcgca gatcagcatt	1320
gctgcgggtga atacgttccc gggccttgta cacaccgccc gtcacgtcac gaaagtcggt	1380
aacacccgaa gccggtggcc caacccttgt gggagggagc tgtcgaaggt gggactggcg	1440
attg	1444

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<210> 11
 <211> 503
 <212> DNA
 <213> actinomycete

<220>
 <221> misc_feature
 <222> (1)..(499)
 <223> "n" is unknown nucleotide

<400> 11
 ccgccttcgc caccggtggt cctcctgata tctgcgcatt tcaccgctac accaggaatt 60
 ccnatctccc ctaccgaact ctanctgccc cgtatcnact gcaaaccggt gggttaagccc 120
 cgggctttca caaccgacnt gacaagccgc ctacaanctc ttacnccca ataattccgg 180
 acaacgcttg cgcctacnt attaccggtg ctgctggcac ntatttagcc ggcgcttctt 240
 ctgcaggtac cgtcactttc gcttcttccc tgctgaaaaa gggtttacaac ccgaaggccg 300
 tcntccctca cgcggcgctg ctgcatcagg ctttcgcccc ttgtgcaata ttccccactg 360
 ctgcctcccg taggattctg ggccgtgtct cantcccant ntggccgggc ccctctcagg 420
 ccgntaccc gtcgtccctt ggtgaaccnc tacctcncca acaanctgat agggcgcggtg 480
 ctcanctgc acgcccgganc ttt 503

<210> 12
 <211> 1173
 <212> DNA
 <213> actinomycete

<220>
 <221> misc_feature
 <222> (1)..(1144)
 <223> "n" is unknown nucleotide

<400> 12
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 agtaanangt gggcaatttg ccttcattt tggacaagcc ctggaaacgg gtttaataacc 120
 ggataacatt ttntcccgca tgggagggg ttgaaagntc cggcggtgaa ggatgagccc 180
 gcggcctatn agcttggttg tggggtaatg gcctacccaa gggagacggg tagccggcct 240

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gagagggcga ccggccacac tgggaatgag anacggccca gaatcctacg ggaggcagca      300
gtggggaata ttgcacaatg ggcgaaagcc tgatgcagcg angccgcgtg agggatgacg      360
gccttngggg tgtaaacctt tttnagcagg gaagaagcga aagtgcaggg acctgcagaa      420
gaagcgccgg ctaaataagt gccagcagcc gcggtataaa gtagggcgca agcgttgtcc      480
ggaattattg ggcgtaaaga gcttgtaggc ggcttgtcan gtnggatgtg aaagcccggg      540
gnttaacccc gggtttgcat ttgatacggg ctagnatagag tgtggtaggg gagatnggaa      600
ttcctgggtg agcggtgaaa tgcgcagata tcaggaggaa caccgggtggc gaaggcggat      660
ctctgggcca ttactgacgc tgaggagcga aagcgtgggg agcgaacagg attagatacc      720
ctggtagtcc acgccgtaaa cgttgggaac taggtgttgg cgacattcca cgtcgtcggt      780
gccgcagcta acgcattaag ttccccgnct ggggagtagc gccgcaaggc taanactcaa      840
aggaattgac gggggcccg nacaagcagcg gancatgtgg cttaattcga cgcanccgca      900
agaaccttac caaggcttga catataccgg aaagcatcag agatggtgcc ccccttgtgg      960
tcgntataca ngtggtgcat gncgtgtcgtc acctcgtgtc gtgagatgtt gggttaagtc     1020
ccgcaacgag cgcnacccct gntctgtgtt gncancatgc ccttcggggg tgatggggac     1080
tcacaggana ctgnccgggg tcaactccgg angaagggtg gtgacgaagt caaggtcac     1140
atgnccccct atgtcttggt gctgcacacg tgc                                     1173

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<210> 13

<211> 1404

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(493)

<223> "n" is unknown nucleotide

<400> 13

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ttcggnggtg gantagnggc gnacgggnga ccaacangng ggcaatcccc ccttcanttt      60
nggacaaccc ctggaaacgg gttntaatac cggataacan tttntccccg catgggagg      120
ggttgaaagc tccggcgggtg aaggatgagc ccgcggccta tcagcttggt ggtggggtaa      180
tggcctacca aggcgacgac gggtagccgg cctgagaggg cgaccggcca cactgggant      240
gaganacggc ccagaatcct acgggaggga gcagtgggga atattgcaca atgggcgaaa      300

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gcctgatgca ggcacgccc gtgagggatg acggccttcg gggtgtaaac ctttttcagc      360
aggggaagaag cgaaagtgac ggtacctgca gaagaagcgc cggctaaata ngtgccagca      420
gccgcggtaa tangtagggc scaagcggtg tccggaatta ttgggcgtaa agagnttgta      480
ggcggttgtt cangtcggat gtgaaagccc ggggcttaac cccgggtttg cattcgatac      540
gggctagcta gagtgtggtg ggggagatcg gaattcctgg tgtagcggtg aaatgcgcag      600
atatcaggag gaacaccggt ggcgaaggcg gatctctggg ccattactga cgctgaggag      660
cgaaagcgtg gggagcgaac aggaattaga taccctggta gtccacgcgc taaacgttgg      720
gaactaggtg ttggcgacat tccacgtcgt cggtgccgca gctaacgcac taagttcccc      780
gcctggggag tacggcccgc aaggctaaaa ctcaaaggaa ttgacggggg cccgcacaag      840
cagcggagca tgtggcttaa ttcgacgcaa cgcgaagaac cttaccaagg cttgacatat      900
accggaaaagc atcagagatg gtgccccctt tgtggtcggg atacaggtgg tgcattggctg      960
tcgtcagctc gtgtcgtgag atgttgggtt aagtcccgca acgagcgcaa cccttggttc     1020
tgtgttgccc agcatgccct tcggggtgat ggggactcac aggagactgg ccggggtcaa     1080
ctcggaggaa ggtggggacg acgtcaagtc atcatgcccc ttatgtcttg gggctgcaca     1140
cgtgctacaa tggccggtac aatgagctgc gatgccgcga aggcggagcg aatctcaaaa     1200
aagccggtct cagttcggat tggggtctgc aactcgaccg catgaagtcg gagttgctag     1260
taatgcaga tcagcattgc tgcggtgaat acgttcccgg gccttgtaga caccgcccgt     1320
cacgtcacga aagtcggtta caccgaagc cgggtggtcca accccttggt ggagggagct     1380
gtcgaagggtg ggactggcga ttgg                                     1404

```

<210> 14

<211> 1411

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(1411)

<223> "n" is unknown nucleotide

<400> 14

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aacacatgca agtcgaacga tgaagccgct tcggtggtgg attagtggcg aacgggtgag      60
taacacgtgg ccaantgtgn ccgtcactat gggacgaaga ccttggaaac ggggtctaat     120

```

```

accggataac actctgtccc gcatgggacg ggggtgaaag ctccggcggg gaaggatgag      180
cccgcggcct atcagcttgt tggtggggta atggcctacc aaggcgacga cgggtagccg      240
gcctgagagg gcgaccggcc aactggggac tgagacacgg ccagactcc tacgggaggc      300
agcagtgggg aatattgcac aatgggcgaa agcctgatgc agcgacgccg cgtgagggat      360
gacggccttc gggttgtaaa cctctttcag cagggaagaa gcgaaagtga cggtacctgc      420
agaagaagcg ccggctaact acgtgccagc agccgcggta atacgtaggg cgcaagcggt      480
gtccggaatt attgggcgta aagagctcgt aggcggccttgc tcacgtcgga tgtgaaagcc      540
cggggcctta ccccggtct gcattcgata cgggctagct agagtgtggt aggggagatc      600
ggaattcctg gtgtagcggg gaaatgcgca gatattcagg aggaacaccg gtggcgaagg      660
cggatctctg ggccattact gacgctgagg agcgaaagcg tggggagcga acaggattat      720
ataccctggg agtccacgcc gtaaactgtt ggaactaggt gttggcgaca ttccacgtcg      780
tcggtgccgc agctaacgca ttaagttccc cgctgggga gtacggccgc aaggctaaaa      840
ctcaaaggaa ttgacggggg ccgcacaag cagcggagca tgtggcttaa ttcgacgcaa      900
cgcaagaac cttaccaagg cttgacatat accggaaagc atcagagatg gtgccccct      960
tgtggtcggg atacaggtgg tgcattggctg tcgtcanctc gtgtcgtgag atgttgggtt     1020
aagtcccgca acgagcgcaa cccttgttct gtgttgccag catgcccttc ggggtgatgg     1080
ggactcacag gagactgccg ggggtcaactc ggaggaaggt ggggacgacg tcaagtcac      1140
atgcccctta tgtcttgggc tgcacacgtg ctacaatggc cgctacaatg acctgcgatg     1200
ccgcgaggcg gaccgaatct caaacaagcc cgtctcattc ggattgcggg ctgcaactcc     1260
gaccccatga agtccgactt gctagtactc gcacgtcaac attgctgcgc tgaatacgtc     1320
ccggggcctt gtacacaccg ccggtcacgt cagcaaagtc ggtaacaccc gaagccggtg     1380
gnccaacccc ttgtgggagg gagctgtcga a                                     1411

```

<210> 15

<211> 562

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(547)

<223> "n" is unknown nucleotide

<400> 15

```

ccgccttcgc caccggtggt cctcctgata tctgcgcatt tcaccgctac accaggaatt      60
ccnctctccc ctaccacact ctagctancc cgtatcnaat gcaaaccgcg ggtaacccc      120
cgggctttca caccnact nacaanccgc ctacaaactc ttacgcccataa atattccgg      180
acaacgcttg cgcctactt attaccgcg cgtctggcac ttatttagcc ggcgcttctt      240
ctgcaggtac cgtcactttc gcttcttccc tgctgaaaaa ggtttacaac ccgaaggcng      300
tcctccctca cgggcntcg ctgcatcagg ctttcgcccata ttgtgcaata tccccactg      360
ctgcctcccg tagnantctg ggccgtntct cantcccagt gtggnccggtc gccctctcag      420
gccggctacc cgtcgtcncc tnggtnaacc attanntcac caacaagctg ataggccgcg      480
ggctcctcct tcaccgcccg agcttttaac cctgcccata gaaaacagan gtnttatccg      540
gtattanaac ccgtttccag gg                                         562

```

<210> 16

<211> 1390

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(1362)

<223> "n" is unknown nucleotide

<400> 16

```

atgcaagtgc agcggaaagg cccttcgggg tactcgagcg gcgaacgggt gagtaacacg      60
tgagttaatc tgccccaggc tctggatacc caccggaaaa cggtgattaa taccgaatac      120
gacaaccgat ttgcatgac tggtggtgna aagtttttcg gcctgggatg tgcttcgcg      180
cctatcagct tgttggtgag gtaatggctc acccaaggct tcgacggtag ccggcctgag      240
agggtgaccg nccacactgg gactgagaca cggcccagac tcctacggga ggcagcagtg      300
gggaatattg gacaatgggc ggaagcctga tcagcaacg ccgcgtgagg gatgacggcc      360
ttcgggttgt aaacctcttt cagcacagac gaagcgcaag tgacggtatg tgcagaagaa      420
ggaccggcca actacgtgcc agcagccgcg gtaatacgta gggccgagc gttgtccgga      480
attattgggc gtaaagggt cgtaggcggt ctgtcgcgtc gggagtgaac accaggtgct      540

```

- 15 -

```

taacacctgg cctgctttcg atacgggcag nctagaggta cncaggggag aatggaattc      600
ctggtgtagc ggtgaaatgc gcagatatca ggaggaaaca ccggtggcga agncggttct      660
ctgggagtat cctgacgctg aggagcgaaa gtgtggggag cgaacaggat tagataccct      720
ggtagtccac accgtaaacg ttgggcgcta ggtgtgggac acattccacg tgttccgtgc      780
cgcagctaac gcattaancg ccccgcttgg ggagtacggc cgcaangcta aaactcanag      840
gaattgacgg gggcccgcac aagcggcgga gcatgcggat taattcgatg caacgcgaag      900
aaccttacct gggtttgaca tacaccggaa agccgtacag atacggcccc ttttagtcgg      960
tgtacagggtg gtgcatggct gtcgtcagct cgctgtcgtg agatgttcgg gttaagtccc     1020
gcaacgagcg caaccctcgt cctatgttgc cagcaattcg gttggggact cataggagac     1080
tgccgggggtc aactcggagg aagggtggga tgacgtcaag tcatcatgcc ccttatgtcc     1140
agggcttcac gcatgctaca atggccggtg caaagggtct cgatcccgtg agggtgagcg     1200
aatcccaaaa agccggtctc agttcggatt ggggtctgca actcgacccc atgaagtcgg     1260
agtcgctagt aatcgcagat cagcaacgct gcggtgaata cgttcccggg ccttgtagac     1320
accgcccgtc acgtcacgaa agtcggcaac acccgaagcc antggcccaa ctcgtaagag     1380
agggagctgt                                     1390

```

<210> 17

<211> 1411

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(638)

<223> "n" is unknown nucleotide

<400> 17

```

gtgcttaaca catgcaagtc gaacgatgaa gccgcttcgg tggtaggatta gtggcgaacg      60
ggtagagtaac acgtgggcaa tctgcccttc actctgggac aagccctgga aacgggggtct     120
aataccggat aacactctgt cccgcatggg acgggggttg aagctccggc ggtgaaggat     180
gagccccgcg cctatcagct tgttggtggg taatggccta ccaaggcgac gacgggtagc     240
cggcctgaga gggcgaccgg ccacactggg actgagacac ggcccagact cctacgggag     300
gcagcagtgg ggaatattgc acaatgggcg aaagcctgat gcagcgacgc cgcgtgaggg     360

```

```

atgacggcct tcgggttgta aacctcttcc agcagggaag aagcgaaagt gacggtacct 420
gcagaagaag cgccggctaa ctacgtgccg gcagccgcgg taatacgtag ggcgcaagcg 480
ttgtccggaa ttattgggcg taaagagctc gtaggcggct tgtcacgtcg gatgtgaaag 540
ccccgggctt aaccccgggt ctgcattcga tacgggctag ctagagtgtg gtaggggaga 600
tcggaattcc tgggtgtagcg gtgaaatgcg cagatatnca ggaggaacac cggtggcgaa 660
ggcggatctc tggccattac tgacgtcgag gagcgaaagc gtggggagcg aacaggatta 720
gataccctgg tagtccacgc cgtaaacgtt gggaactagg tgttggcgac attccacgtc 780
gtcgggtgccg cagctgaacg cattaagtcc cccgcctggg gagtacggcc gcaaggctaa 840
aactcaaagg aattgacggg ggcccgacac agcagcggag catgtggctt aattcgacgc 900
aacgcgaaga accttaccaa ggcttgacat ataccggaaa gcatcagaga tgggtgcccc 960
cttgtggtcg gtatacaggt ggtgcatggc tgtcgtcagc tcgtgtcgtg agatgttggg 1020
ttaagtcccg caacgagcgc aacccttggt ctgtgttgcc agcatgccct tcggggtgat 1080
ggggactcac aggagactgc cggggtcaac tcggaggaag gtggggacga cgtcaagtca 1140
tcatgccccct tatgtcttgg gctgcacacg tgctacaatg gccggtacaa tgagctgcga 1200
tgccgcgagg cggagcgaat ctcaaaaagc cgggtctcagt tcggattggg gtctgcaact 1260
cgaccccatg aagtcggagt tgctagtaat cgcagatcag cattgctgcg gtgaatacgt 1320
tcccgggctt tgtacacacc gccgtcacgt cacgaaagtc ggtaacaccc gaagccggtg 1380
gcccaaccgc cttgtgggag ggaactttcc a 1411

```

<210> 18

<211> 1370

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(1367)

<223> "n" is unknown nucleotide

<400> 18

```

atgcaagtng aacgatgaan ccntttgggg tggattagtg gcgaacgggt gagtaanang 60
tgggcaattt gcccttcaat ttgggacaag ccctggaaac ggggtntaat accggataac 120
antntgtccc gcatgggacg ggggtaaaag ctccggcggt gaaggatgag cccgcggcct 180
atnagcttgt tgggtggggtg atggcctacc aaggcgacga cgggtagccg gcctgagagg 240

```



```

gcgaccggcc acactgggac tgagacacgg cccagactcc tacgggagggc agcagtgggg 300
aatattgcac aatggggcgaa agcctgatgc agcgacgccc cgtgagggat gacggccttc 360
gggttgtaaa cctttttcag caggggaagaa gcgaaagtga cggtagctgc agaagaagcg 420
ccggctaaat angtgccagc agccgcggta atangtaggg cgcaagcggt gtccggaatt 480
attggggcgta aagagtttgt aggcggcttg tcacgtngga tgtgaaagcc cggggcttaa 540
ccccgggttt gcattcgata cgggctagct agagtgtggt aggggagatc ggaattcctg 600
gtgtagcggg gaaatgcgca gatatcagga ggaacaccgg tggcgaaggc ggatctctgg 660
gccattactg acgntgagga gcgaaagcgt ggggagcnaa cagnattaga taccctggta 720
gtccaagccg taaacgttgg gaactangtg ttggcgacat tccacgtcgt cnntgccgca 780
nctaacgcat taagttcccc gcctggggag tacggccgca aggctaanac tcaaaggaat 840
tgangnnngc ccgcacaagc agcggagcat gtggcttant tcnacgcanc gcgaagaacc 900
ttaccaaggt ttgccatata ccggaaagca tcagagatgg tgccccctt gtggtcggta 960
tacaggtggt gcntggctgt cgtcagctcg tgtcgtgaca tggttggttaa gtcccgtcaa 1020
cgaggcgcaa ccttggtnt gtgtngccag catgcccttc ggggtgatgg ggactcacag 1080
gagactgccg gggtaactc ggaggaaggt ggggacgacg tcaagtcac atgcccccta 1140
tgtcttgggc tgcacacgtg ctacaatggc cggtagaatg agctgcgatg ccgcgaggcg 1200
gagcgaatct caaaaagccg gtntcagttc ggattggggg ctgcaactcg accccatgaa 1260
gtcggagttg ctagtaatcg cagatcagca ttgctgcggg gaatacgttc cggggccttg 1320
tacacaccgc ccgtcacgtc acgaaagtcg gtaacacccg aagccgntgg 1370

```

<210> 19

<211> 1162

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(1156)

<223> "n" is unknown nucleotide

<400> 19

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gaacgatgaa gccgtttcgg tgggtgatta gtggcgaacg gtgagtaaaa gtggcaattt 60
ncccttcatt ttggacaagc cctgggaacg ggttitaanac cggataacat tntgtccgc 120

```

```

atggggacggg gttgaaagnt cccggcggtg aaggatgagc ccgcggcnta tcagcttggt 180
ggtaggggtaa tggcctacca aggcgacgac gggtagccgg cctgagaggg cgaccggcca 240
cactgggant gagacacggc ccagactcct acgggaggca gcagtgggga atattgcaca 300
atggggcгаа gcctgatgca gcgacgccgc gtgagggatg acggccttcg ggttgtaaаc 360
ctnttttcagc agggaaagaag cgaaagtгac ggtacctgca gaagaagcgc cggctaaata 420
ngtgccagca gccgcggtaa tangtagggc gcaagcggtg tccggaatta ttgggcgtaa 480
agagcttgta ggcggcttgt cangtcggat gtgaaagccc ggggcttaac cccgggttg 540
cattcgatac gggctagtta gagtgtggta ggggagatng gaattcctgg tgtagcggtg 600
aaatgcgcag atatcaggag gaacaccggt gccgaaggcg gatctctggg ccattactga 660
cgctgaggag cgaaagcgтg gggagcnaac aggattagat accctggtag tccacgccgt 720
aaacgttggg aactaggtgt tggcgacatt ccacgtcgtc ggtgccgcag ctaacgcatt 780
aagttccccg cctggggagt acggccgcaa ggctaaaact caaaggaatt gacggggggc 840
cgcacaaгca gcggagcatg tggcttaatt cgacgcaacg cgaacaacct taccaaggct 900
tgacatatac cggaaagcat canagatggt gcccccttg tggtcggtat acangtggtg 960
catggctgtc gtcagctcgt gtcgtgagat gttgggttan gtcccгcaac gagcgcnacc 1020
cttgttctgt gtcgncnagc atgcccttcg nggtgatggg gactcacang agactgncgg 1080
ggtccactcg gaggaaggтg gcgacnacgt canntcatca tgccccctta tgtcttggn 1140
ctggccacgt gcnacnatgg cc 1162

```

<210> 20

<211> 1411

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(1404)

<223> "n" is unknown nucleotide

<400> 20

```

gctggcgggc tgcttaacac atgcaagtcg aacgatgaag ccgcttcggt ggtggattag 60
tggcgaacgg gtgagtaaca cgtgggcaat ctgcccttca ctctgggaca agccctggaa 120
acggggтcta ataccgгata acactctgtc ccgcatggga cggggttgaa agctccggcg 180

```

```

gtgaaggatg agccccgggc ctatcagctt gttggtggg taatggccta ccaaggcgac      240
gacgggtagc cggcctgaga gggcgaccgg ccacactggg actgagacac ggcccagact      300
cctacgggag gcagcagtgg ggaatattgc acaatgggcg aaagcctgat gcagcgacgc      360
cgcgtgaggg atgacggcct tcgggttgta aacctctttc agcagggaaag aagcgaaagt      420
gacggtacct gcagaagaag cgccggctaa ctacgtgcca gcagccgagg taatacgtag      480
ggcgcaagcg ttgtccggaa ttattggggc taaagagctc gtagggcggt tgtcacgtcg      540
gatgtgaaag cccggggctt aaccccggtt ctgcattcga tacgggctag ctagagtgtg      600
gtaggggaga tcggaattcc tgggtgtagc gtgaaatgcg cagatatcag gaggaacacc      660
ggtggggaaag gcggatctct gggccattac tgacgtgag gagcgaaagc gtggggagcg      720
aacaggatta gataccctgg tagtccaagc cgtaaacgtt gggaactang tgttggcgac      780
attccacgtc gtcggtgccg cagctaacgc attaatctcc ccgtcctggg gagtacggcc      840
gcnaggctaa aactcaaagg aattgacggg ggcccgaca agcagcgag catgtggctt      900
anttcgacgc nacgcgaaga accttnccaa ggctgacata taccggaaag catcacagat      960
ggtgcccccc ttgtggtcgg tatacagggt ggtgcatggc tgttcgtcag ctctgtctgt      1020
gagatgttgg gttaagtccc gcaaagagcg caaccgtgtt ctgtgttgcc agcatgccct      1080
tcggggtgat ggggactcac acgagactgt cngggtaac tcggaggaag gtggggacga      1140
cgtcaagttc atcatgcccc ttatgtcttg ggctgcacac gngctacaat ggccggtaca      1200
atgagnnggg atgccgcgag gcggagcgaa tctcaaaaag ccggtctcag ttcggattgg      1260
ggtctgcaac tgaccccatg aagtcggagt tgctagtaat cgcagatcag cattgctgcg      1320
gtgaatacgt ncccgggcct ngtaacacac acccgtcacg tcacgaaagt cggtaacacc      1380
ctaagccggt gncccaaccc ctnttgggag g                                     1411

```

<210> 21

<211> 549

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(431)

<223> "n" is unknown nucleotide

<400> 21

ccaganatcc gccttcgcca ccggtgttcc tcttgatata tgcgcatttc accgctacac	60
caggaattcc gatctcccct accacactct agctagcccg tatcgaatgc agacccgggg	120
ttaagccccg ggctttcaca tccgacgtga caagccgctt acgagctctt tacgccaat	180
aattccggac aacgcttgcg ccctacgtat taccgcggt gctggcacgt agttagccgg	240
cgcttcttct gcaggtaccg tcactttcgc ttcttccttg ctgaaagagg tttacaaccc	300
gaaggncgtc atccctcacg cggcgtcgct gcacaggct ttccgccatt gtgcaatatt	360
ccccactgct gcctcccgta ggagtctggg ncgtgttcaa tncagtggt gggccggtcg	420
ccctctcagg ncggctaccg tcgtcgctt ggtaggcatt accacaacaa gctgataggc	480
gggggtcatc cttcaacgcc ggagcttcaa acccgccat gcgggacaag tgtatccggt	540
attaaaccc	549

<210> 22

<211> 672

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(643)

<223> "n" is unknown nucleotide

<400> 22

tcagtnatgg cccagaanga tccgncttcg ccaccggtgt tcttctgat atctgcgcat	60
ttcaccgcta caccaggaat tccgatctcc cctaccacac tctaactagc cgtatcgaa	120
tgcagacccg gggttaagcc ccgggcttcc acatccgacg tgacaagccg cctacgagct	180
cttnacgccc aataattccg gacaacgctt gcgccttacg tattaccgcg gctgctggca	240
cgtagttagc cggcgcttct tctgcaggta ccgtnacttt cgcttcttcc ctgctgaaag	300
aggtttaciaa cccgaaggcc gtcttccctc acgcggcgct gctgcatcag gctttcgccc	360
atngtgcant attccccact gntgntccc gtangagtct gggccgtgtc tcagtcccag	420
tgtggccggt cgnctctca ggccggctac cgtcgctgcc ttggtaggnc attaccaccc	480
aacaagctga tangtcgngg gctcatcctt caccgncgga gntttaaccc cgtncatgcg	540
ggacagagtg ttatccgcta ttanaccggt atncagggt tgtcccatag tgaagggnag	600

atngccacgt gttatcaacg ttcgncacta atnatcaneg aaneggcttc atcgttcgac 660
 ttgcatgtgt ta 672

<210> 23

<211> 678

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(648)

<223> "n" is unknown nucleotide

<400> 23

ctcagcgta gtcattggca agagatccgc cttegccacc ggtgttcctc ctgtatatct 60

gcgcatttca ccgctacacc aggaattccg atctccccta ccacactcta gctagcccgt 120

~~atcgaatgca gaccgggggt taagccccgg gctttcacat ccgacgtgac aagccgccta~~ 180

cgagctcttt acgccaata attccggaca acgcttgcc cctacgtatt accgcggtg 240

ctggcacgta gtttagccgc gcttctcttg caggtaccgt cactttcgct tcttccctgc 300

tgaaagaggt ttacaacccg aaggccgtca tccctcaccg ggcgtcgctg catcaggctt 360

tcgcccattg tgcaatattc cccactgctg cctcccgtag gagtctgggc cgtgtctcag 420

tcccagtgtg gccggctgcc ctctcaggcc ggctaccggt cgtcgccctg gtaggccatt 480

accaccaaac aagctgatag gccgcgggct catccttcan cgnccgagct ttaaccgctc 540

catgcgggac agagtgttat ccggtattaa acccgtttca gggcttgtcc canagtgaag 600

ggcagattgc cacgtgttat canccgttcg ncactaatca cancgaaneg ggttcacgt 660

tcgacttgca tgtgttaa 678

<210> 24

<211> 688

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(666)

<223> "n" is unknown nucleotide

<400> 24

```

ggcccagana tccgncttcg ccaccggtgt tcttcctgaa tatctgcgca tttcaccgct      60
acaccaggaa ttccgatctc ccttaccaca ctctaactag cccgtatcga atgcagaccc      120
ggggttaagc cccgggcttt cacatccgac gtgacaagcc gcctacgagc tctttacgcc      180
caataattcc ggacaacgct tgcgccctac gtattaccgc ggctgctggc acgtaattag      240
ccggcgcttc ttctgcaggt accgtcactt tcgcttcttc cctgctgaaa gaggtttaca      300
accogaaggg cgtcatccct caccgggggt cgctgcatca ggctttcgcc cattgtgcaa      360
tattccccac tgctgntccc cgtangagtc tgggcccgtgt ctcagtccca gtgtggccgg      420
tcgnootctc aggcgggcta ccgtcgtcgc cttggtaggc cattaccca ccaacaagct      480
gatangcogn gggctcatcc ttcanegtcg gagctttcaa nccgtccat gcgggacaga      540
gtgttatccg gtattanacc ccgtntcagg gcttgtccan agtgaagggc agatngccac      600
gtgttatcac cgttcgccac taatnacanc gaaacggctt atcgtnccgac tgcattgtgt      660
aacacncgca gcgttcgtcc tgagccag                                           688

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<210> 25

<211> 702

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(658)

<223> "n" is unknown nucleotide

<400> 25

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cctcaggggt cagtaatggg cccagagatc cgccttcgcc accggtgttc ctctgaata      60
tctgcgcatt tcaccgctac accaggaatt ccgatctccc ctaccacact ctagctagcc      120
cgtatcgaat gcagaccogg ggttaagccc cgggctttca catccgacgt gacaagccgc      180
ctacgagctc tttacgcccataaattccgg acaacgcttg cgccctacgt attaccgagg      240
ctgctggcac gtagttagcc ggcgcttctt ctgcaggtac cgtcactttc gcttcttccc      300
tgctgaaaga ggtttacaac ccgaaggccg tcatccctca cgcggcgctg ctgcatcagg      360

```

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ctttcgccca ttgtgcaata ttccccactg ctgcctcccg taggagtctg ggccgtgtct 420
cagtcaccagt gtggccgggtc gccctctcag gccggctacc cgtcgtcgcc ttgggtaggc 480
attancccan caacaagctg ataggncgcg ggctcatnct tcaacgccgg agctttcaan 540
cccgcccatg cgggacagag tggtatnccg tattaaacct gtttcagggc ttgttccaga 600
gtgaagggca gattgccacg tggtatcaac cgttcggcac taatcacaac gaagcggntt 660
atcgttcgac ttgcatgtgt taacaagccg ccagcgttcg tc 702

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<210> 26

<211> 711

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(687)

<223> "n" is unknown nucleotide

<400> 26

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tcagtaatgg cccagagatc cgccttcgcc accggtgttc ctctggata tctgcgcatt 60
tcaccgctac accaggaatt ccgatctccc ctaccacact ctagctagcc cgtatcgaat 120
gcagaccggt ggtaagccc cgggctttca catccgacgt gacaagccgc ctacgagctc 180
tttacgcca ataattccgg acaacgcttg cgcctacgt attaccggtg ctgctggcac 240
gtagttagcc ggcgtttctt ctgcaggta cgtcactttc gcttcttccc tgctgaaaga 300
ggtttacaac ccgaaggccg tcatccctca cgcggcgtcg ctgcatcagg ctttcgcccc 360
ttgtgcaata ttccccactg ctgcctcccg taggagtctg ggccgtgtct cagtcaccagt 420
gtggccgggtc gccctctcag gccggctacc cgtcgtcgcc ttggtaggcc attaccccac 480
caacaagctg ataggccgcg ggctcatcct tcaccgncgg agctttaacc ccgtcccatg 540
cgggacagag tggtatccgg tattagaacc cgtttccagg gcttgtccca gagtgaaggg 600
cagattgcca cgtgttactc anccgttcgn cactaatcan caacgaagcg gcttcacgtg 660
tcgacttgca tgtgttaagc acgccgncag cgttcgtcct gagccaggat c 711

```

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<210> 27
 <211> 522
 <212> DNA
 <213> actinomycete

<220>
 <221> misc_feature
 <222> (1)..(465)
 <223> "n" is unknown nucleotide

<400> 27
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 tcaccgctac accaggaatt cggatctccc ctaccgaact ctagcctgcc cgtatcgact 120
 gcagacccgg ggttaagccc cgggctttca caaccgacgt gacaagccgc ctacgagctc 180
 tttagcctca ataattccgg acaacgcttg cgcctacgt attaccgagg ctgctggcac 240
 gtagttagcc ggcgcttctt ctgcaggtac cgtcactttc gcttcttccc tgctgaaaga 300
 ggtttacaaa ccgaaggccg tcateccctca cgcggcgctc ctgcatcagg ctttcgcccc 360
 ttgtgcaata ttccccactg gtgntcccg tangagtctg gggcggtgtc cantccagtg 420
 tgggcggctg cctctcaggg cggctaccgt cgtcgcttgg tgagncacta ctcacaacaa 480
 gctgataggc gcgggctcat ctggaacggc ggagctttac ac 522

<210> 28
 <211> 670
 <212> DNA
 <213> actinomycete

<220>
 <221> misc_feature
 <222> (1)..(638)
 <223> "n" is unknown nucleotide

<400> 28
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 caccgctaca ccaggaattc cgatctcccc taccacactc taactagccc gtatcgaatg 120
 cagacccggg ggttaagcccc gggctttcac atccgacgtg acaagccgcc tacgagctct 180
 ttacgccccaa taattccgga caacgcttgc gccctacgta ttaccgaggc tgctggcacg 240


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tagttagccg gcgtttcttc tgcaggtacc gtcactttcg cttcttccct gctgaaagag   300
gtttacaacc cgaaggccgt catccctcac gcggcgtcgc tgcatacaggc ttctgcccatt   360
tgtgcaatat tccccactgc tgccctcccg angagtctgg gccgtgtctc agtcccagtg   420
tggccgggtcg cccctctcagg ccgggtaccg tcgtcgccctt ggtaggccat taccacacaa   480
caagctgata ngncgngggc tcatacttca ccgncggagc tttcaanccc gtcccatgcg   540
ggacagagtg ttatccggta ttaaaccctg ntccagggtc tgtccatagt gaagggcaga   600
ttgccaagtg ttatcancgg ttcgncacta atcatcancg aagcggcttc atcgttcgac   660
tgcattgtgtt                                     670

```

<210> 29

<211> 676

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(666)

<223> "n" is unknown nucleotide

<400> 29

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tcctcagnat cagtaatggc ccagagatcc gccttcgcca ccggtgttcc tcctgatatc   60
tgcgcatcttc accgctaacc caggaattcc gatctcccct accacactct anctagcccg   120
tatogaatgc agaccggggg ttaagccccg ggctttcaca tccgangtga caagccgcct   180
acgagctctt tacgcccaat aattccggac aangcttgcg ccctacgtat taccggcgnt   240
gctggcacgt agttagccgg cgctttcttc gcaggtaccg tcactttcgc ttcttccctg   300
ctgaaagagg ttacaacccc gaaggccgtc atccctcaen cggcgtcgct gcatcaggct   360
ttcgcccatt gtgcaatatt ccccactgct gcctcccgta ggagtctggg ccgtgtctca   420
atcccantgt ggccggtcgc cctctcangc cggtaccgt cgtcgcttgg taggccatta   480
ccccaccaac aagctggata ggncgggggc tcattcttca ccgccggaag ctttaanccc   540
gtccatgcgg gananagtgn atccngtat taaaccnngt ttcagggtt gtccanagt   600
aaggnggatt gcccnagtgt ttatnccccg ttgcccanta atcnacaacg aaagcggntt   660
cntcgnttcg acttgc                                     676

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